

Appln. No. 10/520,008
Amd. dated September 4, 2007
Reply to Office Action of June 6, 2007

REMARKS

The Office Action and the cited and applied references have been carefully reviewed. No claim is allowed. Claims 3-10 presently appear in this application along with newly added claims 17-27 and define patentable subject matter warranting their allowance. Reconsideration and allowance are hereby respectfully solicited.

Claims 1 and 2 have been replaced by new claims 17 and 18, as supported by the present specification at page 8, lines 22-25. New claims 19 and 20 are supported in the present specification at page 10, lines 7-18.

Claims 1 and 7-10 have been rejected under 35 U.S.C. §102(e) as being anticipated by Graham, US Patent 6,573,099. This rejection is respectfully traversed insofar as new claims 17-18 and amended claims 7-10 are concerned.

The examiner alleges that Graham teaches a method of modifying gene expression in a cell by using nucleic acid vectors transferred into the cell, and the preparation of the vectors which comprise inverted repeat sequences, referring to figures 14, 15, and 20 (page 4, lines 6-10 of the Office Action). However, all the vectors indicated in the cited figures have promoter(s) (CMV IE, SV40L). This is consistent with the

teaching in Graham at column 3, lines 59-67 that the nucleotide sequence identical or complementary to the target gene nucleotide sequence is placed under the control of a promoter. Therefore, it is clear to those of skill in the art from the present claims as amended that the DNA according to the present invention does not include a promoter. Accordingly, the presently claimed invention is not anticipated by Graham.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Claims 5-6 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Graham and Robbins et al. Claims 2-3 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Graham, further in view of Dean (US Patent 6,130,207). Claim 4 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Graham, further in view of Wengel et al (WO 99/14226). The above three §103(a) rejections are traversed and discussed together.

As discussed above in the anticipation rejection, Graham does not teach a DNA consisting of an inverted repeat sequence. This deficiency is not satisfied by any of the cited and applied Robbins, Dean and Wengel references because none of these secondary references discloses or teaches inverted repeat

sequences consisting of a sense strand sequence and an antisense strand sequence of a target nucleic acid and containing a mutation to be introduced into the target nucleic acid.

Robbins and Dean are references describing nucleic acid constructs for gene transfer, and such constructs need to have a promoter present so that the genes transferred into cells are expressed. For example, promoters having regulatory means are described under "REGULATED GENE EXPRESSION" at page 42 of Robbins and Dean also describes at column 7, lines 1-6, a promoter to control expression of the DNA molecule to be targeted which would need to be positioned upstream from the DNA molecule to effectively control expression of the DNA molecule.

Accordingly, the combination of Graham and the secondary references cannot lead one of ordinary skill in the art to the presently claimed invention.

Reconsideration and withdrawal of the §103(a) rejections are therefore respectfully requested.

In view of the above, the claims comply with 35 U.S.C. §112 and define patentable subject matter warranting their

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allowance. Favorable consideration and early allowance are earnestly urged.

Respectfully submitted,

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